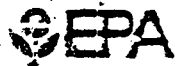


TXD008063661



# POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by Reg)
VI	TX 13765

**GENERAL INSTRUCTIONS:** Complete Sections I and II through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-JJS); 401 M St., SW; Washington, DC 20460.

## I. SITE IDENTIFICATION

TXD008063661

A. SITE NAME	B. STREET (or other identifier)		
Lufkin Creosoting Company	1411 East Lufkin Avenue		
C. CITY	D. STATE	E. ZIP CODE	F. COUNTY NAME
Lufkin	TX	75901	Angelina

## G. SITE OPERATOR INFORMATION

1. NAME	2. TELEPHONE NUMBER
Danny Vines - Plant Superintendent	409/634-5075
3. STREET	4. CITY
P.O. Box 1207	Lufkin
5. STATE	6. ZIP CODE
TX	75901

## H. REALTY OWNER INFORMATION (if different from operator of site)

1. NAME	2. TELEPHONE NUMBER
Danny Vines P.O. Box 1207	409/634-5075
3. CITY	4. STATE
Lufkin	TX
	5. ZIP CODE
	75901

I. SITE DESCRIPTION Abandoned site of Lufkin Creosoting Co.  
Active operations relocated to south of town in 1978.

## J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

## II. TENTATIVE DISPOSITION (complete this section last)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.)	B. APPARENT SERIOUSNESS OF PROBLEM
	<input type="checkbox"/> 1. HIGH <input checked="" type="checkbox"/> 2. MEDIUM <input type="checkbox"/> 3. LOW <input type="checkbox"/> 4. NONE

## C. PREPARER INFORMATION

1. NAME	2. TELEPHONE NUMBER	3. DATE (mo., day, & yr.)
Lisa Arceneaux	512/477-9901	2/06/87

## III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION	
1. NAME	2. TITLE
Lisa Arceneaux	Environmental Engineer
3. ORGANIZATION	4. TELEPHONE NO. (area code & no.)
Engineering-Science, Inc. 2901 N. IH-35 Austin, TX 78722	512/477-9901

## B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
David Wilkes	Engineering-Science, Inc.	512/477-9901
Barry Hubbard	Engineering-Science, Inc.	512/477-9901
Trish Kurl	Texas Water Commission	
Martin Turner	P.O. Box 13087, Austin, Texas 78711	512/463-8541

## C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, residents)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
Danny Vines	Plant Superintendent 409/634-5075	P.O. Box 1207 Lufkin, Texas 75901

9649364



SUPERFUND FILE

NOV 13 1992

REORGANIZED

Reviewed by GH-ESK  
Date 2/23/87

## II. INSPECTION INFORMATION (continued)

## G. GENERATOR INFORMATION (source of waste)

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
Lufkin Creosoting Co.	409/634-5075	1411 East Lufkin Ave. Lufkin, Texas 75901	pentachlorophenol sludge

## H. TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED
BFI-CECOS Intl.	318/527-6857	P.O. Box 5416 Lake Charles, LA 70606	pentachlorophenol sludge

## I. IF WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS
BFI-CECOS Intl.	318/527-6857	P.O. Box 5416 Lake Charles, LA 70606

## J. DATE OF INSPECTION

(mm, day, &amp; yr)

7/22/86

## K. TIME OF INSPECTION

1:33 - 5:20

## L. ACCESS GAINED BY: (credentials must be shown in all cases)

☒ 1. PERMISSION☐ 2. WARRANT

## M. WEATHER (describe)

Clear and hot

## IV. SAMPLING INFORMATION

A. Mark 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, etc. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN (mark 'X')	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
1. GROUNDWATER			
2. SURFACE WATER			
3. WASTE			
4. AIR			
5. RUNOFF			
6. SPILL			
7. SOIL	X (4)	Engineering-Science Laboratory 600 Bancroft Way, Berkeley, CA 94710	8/20/86
8. VEGETATION			
9. OTHER (specify)			

## B. FIELD MEASUREMENTS TAKEN (e.g., radioactivity, explosivity, PH, etc.)

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS
None		
SOIL MONITORING		
WATER MONITORING		

## IV. SAMPLING INFORMATION (continued)

## C. PHOTOS

## 1. TYPE OF PHOTOS

☒ 1. GROUND    ☐ 2. AERIAL

## 2. PHOTOS IN CUSTODY OF:

See Attachment D

## D. SITE MAPS?

☒ YES. SPECIFY LOCATION OF MAPS: See Attachment D  
 Site sketch, area map and floodplain map

## E. COORDINATES

## 1. LATITUDE (deg.-min.-sec.)

31°20'10" N

## 2. LONGITUDE (deg.-min.-sec.)

94°43'00" W

## V. SITE INFORMATION

## A. SITE STATUS

☐ 1. ACTIVE (Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)

☒ 2. INACTIVE (Those sites which no longer receive wastes.)

☐ 3. OTHER (specify):  
 (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

## B. IS GENERATOR ON SITE?

☐ 1. NO    ☒ 2. YES (specify generator's four-digit SIC Code): 2491

## C. AREA OF SITE (in acres)

8 acres

## D. ARE THERE BUILDINGS ON THE SITE?

☐ 1. NO    ☒ 2. YES (specify): an old barn

## VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

<input checked="" type="checkbox"/> A. TRANSPORTER	<input checked="" type="checkbox"/> B. STORER	<input checked="" type="checkbox"/> C. TREATER	<input checked="" type="checkbox"/> D. DISPOSER
1. RAIL	1. PILE	1. FILTRATION	1. LANDFILL
2. SHIP	2. SURFACE IMPOUNDMENT	2. INCINERATION	2. LANDFARM
3. BARGE	3. DRUMS	3. VOLUME REDUCTION	3. OPEN DUMP
4. TRUCK	4. TANK, ABOVE GROUND	4. RECYCLING/RECOVERY	<input checked="" type="checkbox"/> 4. SURFACE IMPOUNDMENT
5. PIPELINE	5. TANK, BELOW GROUND	5. CHEM./PHYS./TREATMENT	5. MIDNIGHT DUMPING
6. OTHER (specify):	6. OTHER (specify):	6. BIOLOGICAL TREATMENT	6. INCINERATION
		7. WASTE OIL REPROCESSING	7. UNDERGROUND INJECTION
		8. SOLVENT RECOVERY	8. OTHER (specify):
		9. OTHER (specify):	See Attachment A

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this form.

☐ 1. STORAGE    ☐ 2. INCINERATION    ☐ 3. LANDFILL    ☒ 4. SURFACE IMPOUNDMENT    ☐ 5. DEEP WELL  
☐ 6. CHEM./BIO./PHYS. TREATMENT    ☐ 7. LANDFARM    ☐ 8. OPEN DUMP    ☐ 9. TRANSPORTER    ☐ 10. RECYCLER/RECLAIMER

## VII. WASTE RELATED INFORMATION

## A. WASTE TYPE

☐ 1. LIQUID    ☒ 2. SOLID    ☒ 3. SLUDGE    ☐ 4. GAS

## B. WASTE CHARACTERISTICS

☐ 1. CORROSIVE    ☐ 2. IGNITABLE    ☐ 3. RADIOACTIVE    ☐ 4. HIGHLY VOLATILE  
☒ 5. TOXIC    ☐ 6. REACTIVE    ☐ 7. INERT    ☐ 8. FLAMMABLE  
☐ 9. OTHER (specify):

## C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

manifest of pentachlorophenol sludge in Attachment B

## D. WASTE RELATED INFORMATION (continued)

2. Estimate the amount (specify unit of measure) of waste by category; mark 'X' to indicate which wastes are present.

1. SLUDGE	2. OIL	3. SOLVENTS	4. CHEMICALS	5. SOLIDS	6. OTHER
AMOUNT 10	AMOUNT unknown	AMOUNT unknown	AMOUNT unknown	AMOUNT unknown	AMOUNT unknown
UNIT OF MEASURE tons	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
<input checked="" type="checkbox"/> (1) PAINT RESIDUES	<input checked="" type="checkbox"/> (1) OILY WASTES	<input checked="" type="checkbox"/> (1) HALOGENATED SOLVENTS	<input checked="" type="checkbox"/> (1) ACIDS	<input checked="" type="checkbox"/> (1) FLYASH	<input checked="" type="checkbox"/> (1) LABORATORY PHARMACEUT.
<input checked="" type="checkbox"/> (2) METALS SLUDGES	<input checked="" type="checkbox"/> (2) OTHER (specify):	<input checked="" type="checkbox"/> (2) NON-HALOGENATED SOLVENTS	<input checked="" type="checkbox"/> (2) ETCHING LIQUORS	<input checked="" type="checkbox"/> (2) ASBESTOS	<input checked="" type="checkbox"/> (2) HOSPITAL
<input checked="" type="checkbox"/> (3) PCTV		<input checked="" type="checkbox"/> (3) OTHER (specify):	<input checked="" type="checkbox"/> (3) CAUSTICS	<input checked="" type="checkbox"/> (3) MILLING/MINE TAILINGS	<input checked="" type="checkbox"/> (3) RADIOACTIVE
<input checked="" type="checkbox"/> (4) ALUMINUM SLUDGE			<input checked="" type="checkbox"/> (4) PESTICIDES	<input checked="" type="checkbox"/> (4) PERMANENT INK PASTES	<input checked="" type="checkbox"/> (4) MUNICIPAL
<input checked="" type="checkbox"/> (5) OTHER (specify): pentachloro- phenol sludge (tank bottoms)			<input checked="" type="checkbox"/> (5) DYES/INKS	<input checked="" type="checkbox"/> (5) NON-PERMANENT INK PASTES	<input checked="" type="checkbox"/> (5) OTHER (specify):
			<input checked="" type="checkbox"/> (6) CYANIDE	<input checked="" type="checkbox"/> (6) OTHER (specify):	
			<input checked="" type="checkbox"/> (7) PHENOLS		
			<input checked="" type="checkbox"/> (8) HALOGENS		
			<input checked="" type="checkbox"/> (9) PCBs		
			<input checked="" type="checkbox"/> (10) METALS		
			<input checked="" type="checkbox"/> (11) OTHER (specify): Creosote con- taminated soils		

G. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE (place in descending order of hazard)

1. SUBSTANCE	2. FORM (Mark 'X')				3. TOXICITY (Mark 'X')				4. CAS NUMBER	5. AMOUNT	6. UNIT
	5. SOL- LIG.	6. SOL- LIG.	7. VAP- OR	8. HIGH MED.	9. HIGH MED.	10. LOW MED.	11. NONE				
creosote constituents:											
fluorene		X		X					unknown	unknown	
phenanthrene		X		X					85018	unknown	
fluoranthene		X		X					206440	unknown	
pyrene		X		X					129000	unknown	
acenaphthene		X		X					unknown	unknown	
napthalene		X		X					91203	unknown	
benzo(a)anthracene		X		X					unknown	unknown	

## VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

☒ A. HUMAN HEALTH HAZARDS

Possibility exists for human contact with contaminated soil off site located across Lufkin Ave. and adjacent to a resident's fence line.

## VIII. HAZARD DESCRIPTION (continued)

☒ B. NON-WORKER INJURY/EXPOSURE

Possibility exists for contact with off-site contaminated soil located on the south side of Lufkin Ave. across from the site.

☐ C. WORKER INJURY/EXPOSURE

None observed

☐ D. CONTAMINATION OF WATER SUPPLY

None observed

☐ E. CONTAMINATION OF FOOD CHAIN

None observed

☒ F. CONTAMINATION OF GROUND WATER

Possibility exists since groundwater is approximately 50-75 feet below the surface and drainage ditch traversing the site appeared to be contaminated with creosote constituents during the inspection.

☒ G. CONTAMINATION OF SURFACE WATER

Drainage ditch traversing site visually appeared to be contaminated with creosote constituents. Surface water in ditch had an oily sheen.

## VIII. HAZARD DESCRIPTION (continued)

☐ H. DAMAGE TO FLORA/FAUNA

None observed

☐ I. FISH KILL

None observed

☐ J. CONTAMINATION OF AIR

None observed

☒ K. NOTICEABLE ODORS

Creosote odors present in the drainage ditch traversing the site.

☒ L. CONTAMINATION OF SOIL

Contaminated soil present in the drainage ditch at the east side of the site and in off-site soil located across Lufkin Ave. south of the site.

☐ M. PROPERTY DAMAGE

None observed

## VIII. HAZARD DESCRIPTION (continued)

☐ N. FIRE OR EXPLOSION

None observed

☒ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

Runoff of an oily sheen observed in drainage ditch traversing the site.

☐ P. SEWER, STORM DRAIN PROBLEMS

None observed

☒ Q. EROSION PROBLEMS

Erosion observed along the culvert (part of the drainage ditch) on the east side of the site.

☐ R. INADEQUATE SECURITY

None observed

☐ S. INCOMPATIBLE WASTES

None observed

## VIII. HAZARD DESCRIPTION (continued)

☐ T. MIDNIGHT DUMPING

None observed

☐ U. OTHER (specify):

None observed

## IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE (specify units)
1. IN RESIDENTIAL AREAS	20,000	20,000	6,670	1 mile
2. IN COMMERCIAL OR INDUSTRIAL AREAS	6,930	6,930	693	4 miles
3. IN PUBLICLY TRAVELLED AREAS	35,000	35,000	-	1 mile
4. PUBLIC USE AREAS (parks, airports, etc.)	9,000	9,000	20	4 miles

## X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER (specify units) 55 to 75 feet	B. DIRECTION OF FLOW south, southeasterly	C. GROUNDWATER USE IN VICINITY public, domestic livestock
D. POTENTIAL YIELD OF AQUIFER 200 - 500 gpm	E. DISTANCE TO DRINKING WATER SUPPLY (specify unit of measure) 1.1 to 1.6 miles	F. DIRECTION TO DRINKING WATER SUPPLY south to southwest, east
G. TYPE OF DRINKING WATER SUPPLY		
<input checked="" type="checkbox"/> 1. NON-COMMUNITY < 15 CONNECTIONS <input type="checkbox"/> 2. COMMUNITY (specify town): _____ <input type="checkbox"/> 3. SURFACE WATER <input checked="" type="checkbox"/> 4. WELL Domestic/livestock. 37-43-401, 4B, 4C, 4D, 2C		



Continued From Page 3

X. WATER AND HYDROLOGICAL DATA (continued)				
H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE				
1. WELL	2. DEPTH (specify unit)	3. LOCATION (proximity to population/buildings)	4. NON-CONTACT COMMUNITY (mark 'X')	5. COMMUNITY (mark 'X')
None known				

**I. RECEIVING WATER**

1. NAME  
Intermittent Creek of Hurricane Creek

☐ 2. SEWERS      ☒ 3. STREAMS/RIVERS

☐ 4. LAKES/RESERVOIRS      ☐ 5. OTHER (specify): \_\_\_\_\_

**6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS**

Neches River Basin, Segment #604

Uses: Contact and noncontact recreation, propagation of fish and wildlife and domestic raw water supply.

**XI. SOIL AND VEGETATION DATA**

LOCATION OF SITE IS IN:

☒ A. KNOWN FAULT ZONE      ☐ B. KARST ZONE      ☐ C. 100 YEAR FLOOD PLAIN      ☐ D. WETLAND

Possible

☐ E. A REGULATED FLOODWAY      ☐ F. CRITICAL HABITAT      ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

**XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED**

Mark 'X' to indicate the type(s) of geological material observed and specify where necessary, the component parts.

A. OVERBURDEN	B. BEDROCK (specify below)	C. OTHER (specify below)
1. SAND		
X 2. CLAY		
3. GRAVEL		

**XIII. SOIL PERMEABILITY**

Permeability:  $10^{-3}$  to  $10^{-5}$  cm/sec

☐ A. UNKNOWN      ☐ B. VERY HIGH (100,000 to 1000 cm/sec.)      ☐ C. HIGH (1000 to 10 cm/sec.)

☐ D. MODERATE (10 to .1 cm/sec.)      ☒ E. LOW (.1 to .001 cm/sec.)      ☐ F. VERY LOW (.001 to .00001 cm/sec.)

**G. RECHARGE AREA**

☐ 1. YES      ☒ 2. NO      3. COMMENTS:

**H. DISCHARGE AREA**

☐ 1. YES      ☒ 2. NO      3. COMMENTS: Surface runoff discharges at the intermittent creek of Hurricane Creek

**I. SLOPE**

1. ESTIMATE % OF SLOPE      2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.

0-3      slightly towards southwest

**J. OTHER GEOLOGICAL DATA**

Pedology: Rosenwall brown fine sandy loam, consists of 60 percent Rosenwall and 40 percent other soils.

See Attachment A

## XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, TSDIS, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (month, day, year)	E. EXPIRATION DATE (month, day, year)	F. IN COMPLIANCE (check "X")		
					1. YES	2. NO	3. UNKNOWN
None							

## XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☐ NONE
 ☒ YES (summarize in this space)

An enforcement letter from C. W. Moritz was issued to Lufkin Creosoting and was dated September 29, 1982 (TWC District 6 office). No details on the enforcement letter are available.

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition (Section II) information on the first page of this form.

# ATTACHMENT A

## POTENTIAL HAZARDOUS WASTE SITE SITE INSPECTION REPORT SUPPLEMENT SHEET

Instruction - This sheet is provided to give additional information in explanation of a question on the form T2070-3.

Corresponding number on form	Additional Remark and/or Explanation
VI-D	A surface impoundment was once used to contain creosote wastewater blowdown. The impoundment was closed in 1973 or 1974 without TDWR participation or oversight.
XIII.J.	<p>The Yegua Formation, the outcropping strata in the site, acts as the major shallow aquifer for the region (Lufkin). It is the uppermost formation of the Claiborne Group and is composed of thin-bedded sand, silt and clay with a thickness ranging from 150 to 400 feet near Lufkin (see Figure 1, cross-section A-A in Attachment B). The Yegua Formation is underlain by the Cook Mountain, Sparta, Reklan, and Carrizo Formations in descending order with a total thickness of 1100 to 1200 feet. The Wilcox Group is overlain by Carrizo sand (120 feet thick), followed by the Midway Group of other Eocene-Tertiary age.</p> <p>There are several minor faults in Lufkin and the vicinity, which is significant with respect to the occurrence and movement of groundwater. The outcrop pattern trends nearly east-west with the dip towards south, and southeast at a rate of 150 feet per mile.</p>

**ATTACHMENT B**

- ☒ Stratigraphic and Hydrogeologic Information
- ☒ Site Inspection Supplemental Report(s)
- ☐ Groundwater Monitoring System Supplemental Form
- ☐ Residential Well Sampling Information
- ☐ Boring Logs and/or Monitoring Well construction and design

Table 1.---Stratigraphic Units and Their Water-Bearing Properties in Angelina and Nacogdoches Counties

Stratigraphic Unit	Approximate Range in Thickness (feet)	Approximate Thickness at Nacogdoches (feet)	Approximate Thickness at Lufkin (feet)	Composition	General Water-Bearing Properties
Alluvium	0-30	0	0	Sand, silt, and clay, with some gravel.	Locally yields small quantities of fresh water to widely scattered shallow dug wells.
Catahoula Formation	2/	0	0	Sand with some clay.	Yields no water to wells.
Jackson Group 1/	0-1,500	0	0	Mostly clay and silt.	Yields small quantities of fresh to brackish water.
Yegua Formation	0-1,050	0	150-400	Mostly thin-bedded sand, silt, and clay.	Yields small to moderate quantities of fresh to brackish water.
Cook Mountain Formation	0-500	0	410	Mostly clay.	Yields small quantities of fresh to brackish water in outcrop area.
Sparta Sand	0-290	0-70	200	Interbedded sand and clay.	Yields small to moderate quantities of fresh water in and near outcrop area.
Weches Formation	0-240	140	150	Mostly clay.	Yields small quantities of fresh to brackish water in outcrop area.
Queen City Sand	0-130	60	50	Interbedded sand and clay. Sands feather out to south and east.	Yields small quantities of fresh water, mostly in outcrop area.
Reklaw Formation	0-290	200	250	Clay and silt, typically having a basal sand.	Yields small quantities of fresh to brackish water.
Carrizo Sand	0-170	90	120	Massive sand.	Yields moderate to large quantities of fresh water.
Wilcox Group	950-3,300	2,500	2/	Interbedded sand, silt, and clay.	Yields small to moderate quantities of fresh water.
Midway Group	2/	2/	2/	Mostly clay.	Yields no water to wells.

1/ Includes Whitsett Formation of Eocene or Oligocene age and Manning, Wellborn, and Caddell Formations of Eocene age.

2/ Not determined.

Source: TOWR Report 110, March 1970

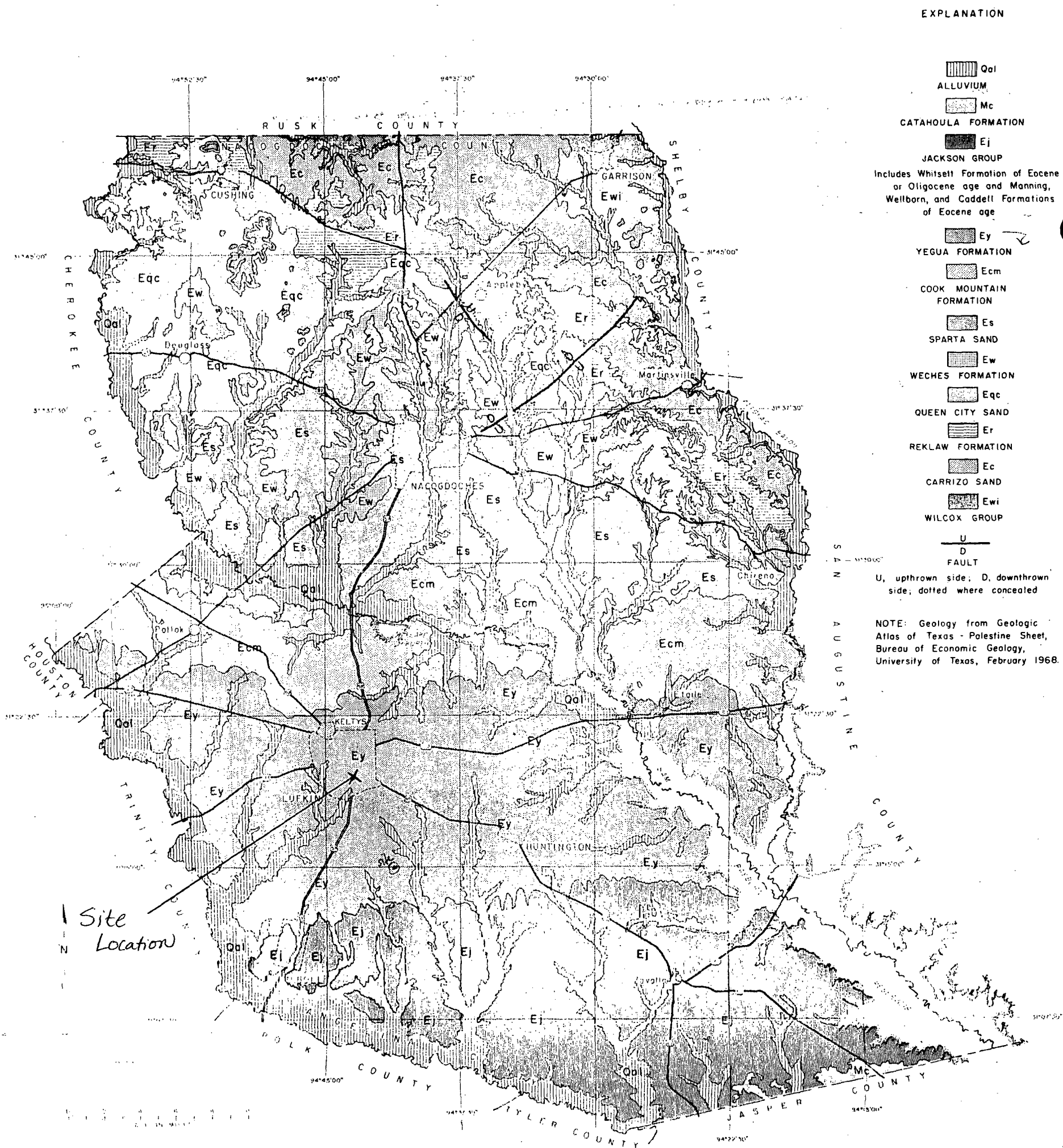


Figure 81  
GEOLOGIC MAP

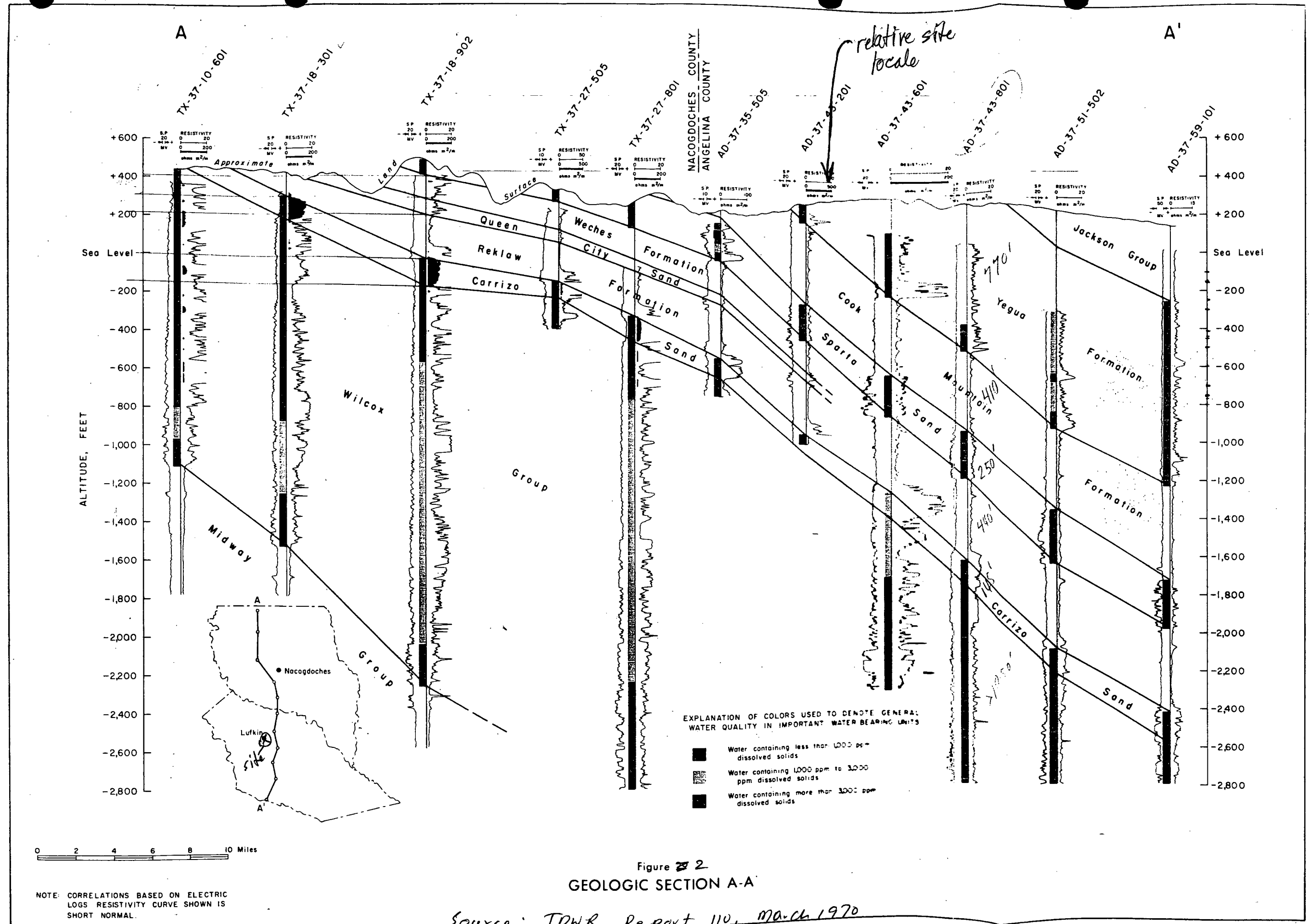


Figure 2  
GEOLOGIC SECTION A-A'

Source: TDWR Report 110, March 1970

**SURFACE IMPOUNDMENTS SITE INSPECTION REPORT**  
(Supplemental Report)

**INSTRUCTION**  
Answer and Explain  
as Necessary.

**1. TYPE OF IMPOUNDMENT**

Storage earthen surface impoundment - closed in 1973 or 1974

**2. STABILITY/CONDITION OF EMBANKMENTS**

Not applicable (N/A) - embankments were pushed inward to fill the impoundment

**3. EVIDENCE OF SITE INSTABILITY (Erosion, Settling, Sink Holes, etc.)**

☐ YES ☐ NO N/A

**4. EVIDENCE OF DISPOSAL OF IGNITABLE OR REACTIVE WASTE**

☐ YES ☐ NO N/A

**5. ONLY COMPATIBLE WASTES ARE STORED OR DISPOSED OF IN THE IMPOUNDMENT**

☐ YES ☐ NO N/A

**6. RECORDS CHECKED FOR CONTENTS AND LOCATION OF EACH SURFACE IMPOUNDMENT**

☐ YES ☒ NO

**7. IMPOUNDMENT HAS LINER SYSTEM**

☐ YES ☒ NO

**7a. INTEGRITY OF LINER SYSTEM CHECKED**

☐ YES ☒ NO

**7b. FINDINGS**

**8. SOIL STRUCTURE AND SUBSTRUCTURE**

clay soils

**9. MONITORING WELLS**

☐ YES ☒ NO

**10. LENGTH, WIDTH, AND DEPTH**

LENGTH 80 feet WIDTH 150 feet DEPTH 28 inches

**11. CALCULATED VOLUMETRIC CAPACITY**

1000 cubic yards

**12. PERCENT OF CAPACITY REMAINING**

N/A

**13. ESTIMATE FREEBOARD**

N/A

**14. SOLIDS DEPOSITION**

☒ YES ☐ NO

**15. DREDGING DISPOSAL METHOD**

N/A

**16. OTHER EQUIPMENT**



MANIFESTS FOR PENTACHLOROPHENOL SLUDGE

## EXHIBIT A

## 1. MANIFEST NUMBER

Generator I.D. No. G-9798Sequence No. 1

STATE OF LOUISIANA  
DEPARTMENT OF NATURAL RESOURCES  
HAZARDOUS WASTE MANAGEMENT  
P. O. BOX 44396  
BATON ROUGE, LOUISIANA 70804

For Dept. Use

Index # \_\_\_\_\_

Date \_\_\_\_\_

## 2. WASTE INFORMATION:

					PACKAGING	
HM	SHIPPING DESCRIPTION	HAZARD CLASS	WASTE NUMBER	WEIGHT (TONS)	QTY.	TYPE
✓	HAZARDOUS WASTE LIQUID, N.O.S. (PENTACHLOROPHENOL)	ORM-E	9798-01	10	1	BULK TANKER

3. GENERATOR INFORMATION: Identification Number: G-9798 Telephone: (409) 634-5075  
 NAME OF COMPANY: LUFKIN CECOSOTING CO.  
 ADDRESS: P.O. BOX 1207 LUFKIN, TX ZIP: 75901  
 SHIPPING LOCATION: 1411 E. LUFKIN AVE. LUFKIN, TX  
 CERTIFICATION: This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, and the Louisiana Department of Natural Resources. EPA # TXD0008063661

Danny Hine  
Generator Signature

6-24-83  
Date

4. TRANSPORTER INFORMATION: Identification Number: T-278-H Telephone: 1-800-231-9225  
 NAME OF COMPANY: BFE DATE OF PICK UP: 6-24-83 TIME: 10:00am  
 CERTIFICATION: This is to certify that the above-named materials were picked up at date and time above and that to the best of the transporter's knowledge, his portion of the manifest is accurately and correctly filled out.

Sam Honeysett TXD099393587  
Transporter Signature

CERTIFICATION: This is to certify that the above-named materials were delivered without incident to the disposer at the date and time below.

Sam Honeysett  
Transporter Signature

DATE OF DELIVERY 6-24-83 TIME: 12:40pm

5. DISPOSER INFORMATION: Identification Number: D-529 Telephone: (318) 527-6857  
 NAME OF COMPANY: BFI- CECOS INTL  
 LOCATION WHERE SHIPMENT RECEIVED: WILLOW SPRINGS RD, NORTH OF SALTPHUR, LA.  
 CERTIFICATION: This is to certify acceptance of the hazardous waste, that the waste has been or will be disposed of in accordance with Department of Natural Resources regulations, and that to the best of the disposer's knowledge, his portion is accurately and correctly filled out. EPA # LAD000618256

C. R. Clark  
Disposer Signature

6-24-83  
Date

## 6. EMERGENCY INFORMATION:

Immediate Response Information: In case of accident or spill, call Louisiana Department of Public Safety Telephone: (504) 925-6595

Special Handling Instructions: \_\_\_\_\_

Comments: \_\_\_\_\_



TEXAS WASTE SHIPPING-CONTROL TICKET  
(Please Type or Print Clearly)

(Satisfies TDWR, TDH and U.S. EPA requirements for hazardous or class I waste manifest)

PART I: To be completed by Generator (see reverse side for instructions)

Company Name LUFKIN CREDITING CO.  
Business Address P.O. BOX 1207 LUFKIN, TX. 75901  
Address From Which Shipment Originates:  
1411 E. LUFKIN AVE. LUFKIN, TX

TDWR/TDH Registration No. NR 31832

EPA Gen. # TXD008063661

Emergency Phone A/C (409) 634-5025

DESTINATION:

Primary TSD Facility Name BFI - CECOS INTL.  
Business Address P.O. BOX 5416 LAKE CHARLES, LA 70606  
Destination (Site) Address WILLOW SPRINGS RD. N. OF SULLA LA, LA

TDWR/TDH Permit No. N/A

EPA TSD Fac. # LA0005618256

Phone A/C (318) 527-6857

Alternate TSD Facility Name \_\_\_\_\_  
Business Address \_\_\_\_\_  
Destination (Site) Address \_\_\_\_\_

TDWR/TDH Permit No. \_\_\_\_\_

EPA TSD Fac. # \_\_\_\_\_

Phone A/C \_\_\_\_\_

1. TEXAS WASTE CODE	2. QUANTITY	UNITS*	3. DOT WASTE NO.	4. DOT HAZ. CLASS	5. (a) DOT DESCRIPTION; (b) TYPE AND NUMBER OF CONTAINERS
<u>15/230</u>	<u>2500</u>	<u>1 0 3 4</u>	<u>NA 9 1 8 9</u>	<u>T</u>	<u>HAZARDOUS WASTE, LIQUID,</u>
		<u>1 2 3 4</u>			<u>N.I.S.</u>
		<u>1 2 3 4</u>			
		<u>1 2 3 4</u>			<u>(PENTACHLORO BENZOL)</u>
		<u>1 2 3 4</u>			<u>1 BULK TANKER</u>
		<u>1 2 3 4</u>			
		<u>1 2 3 4</u>			
		<u>1 2 3 4</u>			

\* Circle one: (1) tons (2) gallons (3) cubic yards (4) drums (55 gal.)

Special Instructions:

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the DOT, TDWR, and TDH.

6-24-83  
Date of Shipment  
Danny Miller  
Signature of Authorized Agent

PART II: To be completed by the Transporter/Driver (see reverse side for instructions)

Carrier Name BFI  
Business Address Port Arthur, TX  
Phone Number A/C 1-800-372-1251

TDWR/TDH Trans. No. 31241

EPA Trans. No. TX0099393589

6-24-83  
Date Received

Don Hanyouk  
Signature of Authorized Agent

I certify (or declare) that the materials in the quantities described above are received by me for shipment to the above named destination.

PART III: To be completed by Treatment, Storage and Disposal Facility (see reverse side for instructions)

Facility Owner/Operator (see reverse side for instructions)  
TSD Facility Name BFI: WASTE SYSTEMS  
Phone Number LAKE CHARLES, LA 70606  
Site Address WILLOW SPRINGS RD.  
TSD Facility Owner/Operator Comments: WESTLAKE, LA  
P.O. BOX 5416  
EPA #LAD 000618256

TDWR/TDH Permit No. \_\_\_\_\_

EPA TSD Fac. # \_\_\_\_\_

6-24-83  
Date Received

C. L. Clark  
Signature of Authorized Agent

I certify (or declare) that the materials in the quantities described in Part I are received by me.

ATTACHMENT C

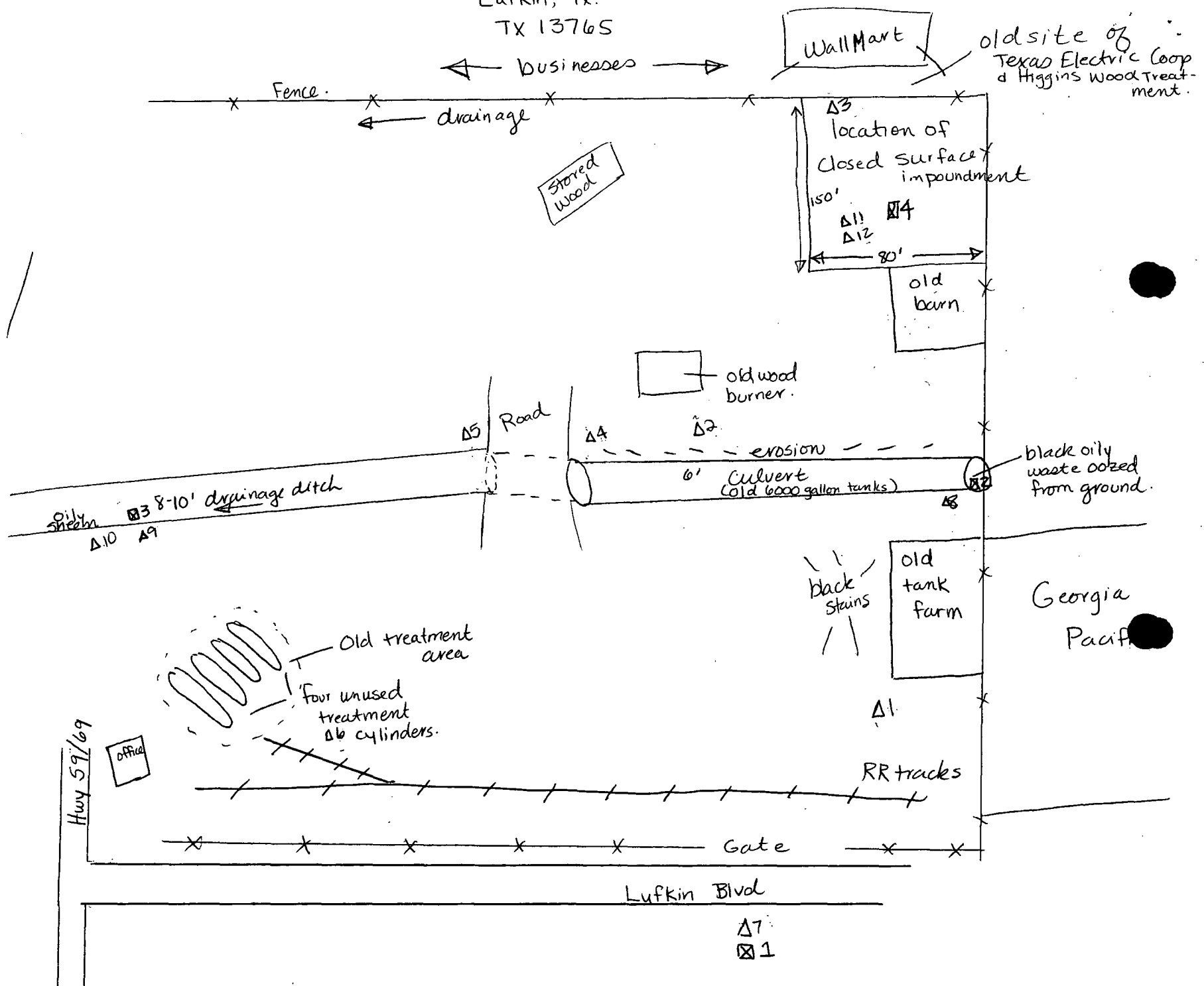
None Groundwater Monitoring Data

None Report(s) from Previous Site Investigation(s)

ATTACHMENT D

- \_\_\_ Site Safety and Work Plan
- ~~\_\_X~~ Site sketch
- ~~\_\_X~~ Laboratory data
- ~~\_\_X~~ Chain-of-Custody form(s)
- ~~\_\_X~~ Topographic map
- ~~\_\_X~~ Floodplain map
- ~~\_\_X~~ Photographs

Site Sketch  
Lufkin Creosoting Co.  
Lufkin, Tx.  
TX 13765



# ES ENGINEERING-SCIENCE

RESEARCH AND DEVELOPMENT LABORATORY • 600 BANCROFT WAY • BERKELEY, CALIFORNIA 94710 • 415/841-7353

Priority Pollutant Analysis  
Creosote Constituents + Pentachlorophenol- EPA 8270  
+ its degradation products

Date Received 7/23/86  
Date Reported 8/20/86

P.O. No.  
Job No. ZB104  
Page 1 OF 1

For: ES-Austin/Texas Water Commission  
Address:

Attn: Barry Hubbard

Source of Sample: TX13765-1  
Lab No: 861817  
Date Collected: 7/22/86  
Time Collected: 1552

Compound	Detection	ANALYTICAL RESULTS
	Limits	
	mg/kg	mg/kg
Naphthalene	2.5	31
Acenaphthylenes	5	5
Acenaphthene	3	70
Fluorene	3	115
Phenanthrene	10	124
Anthracene	3	29
Fluoranthene	3.5	ND
Pyrene	3	99
Chrysene	4	31
Benzo(a)anthracene	15	42
Benzo(b)fluoranthene	10	11
Benzo(a)pyrene	4	5
Indeno(1,2,3-c,d)pyrene	5	8
Dibenzo(a,h)anthracene	4	ND
2-Chlorophenol	5	ND
Phenol	2.5	ND
2,4-Dimethylphenol	4.5	ND
2,4,5-Trichlorophenol	10	ND
2,4,6-Trichlorophenol	4.5	ND
4-Chloro-3-methylphenol	5	ND
2,4-Dinitrophenol	70	ND
Pentachlorophenol	5	ND

  
Laboratory Supervisor

# ES ENGINEERING-SCIENCE

RESEARCH AND DEVELOPMENT LABORATORY • 600 BANCROFT WAY • BERKELEY, CALIFORNIA 94710 • 415/841-7353

Priority Pollutant Analysis  
Creosote Constituents + Pentachlorophenol- EPA 8270  
+ its degradation products

Date Received 7/23/86

Date Reported 8/20/86

P.O. No.

Job No. ZB104

Page 1 OF 1

For: ES-Austin/Texas Water Commission  
Address:

Attn: Barry Hubbard

Source of Sample:

TX13765-2

Lab No:

861818


Date Collected:

7/22/86

Time Collected:

1607

Compound	Detection	ANALYTICAL RESULTS
	Limits mg/kg	mg/kg
Naphthalene	1	82
Acenaphthylenes	2	3
Acenaphthene	1.2	125
Fluorene	1.2	223
Phenanthrene	4	214
Anthracene	1.2	44
Fluoranthene	1.4	165
Pyrene	1.2	142
Chrysene	1.6	34
Benzo(a)anthracene	6	49
Benzo(b)fluoranthene	4	19
Benzo(a)pyrene	1.6	6
Indeno(1,2,3-c,d)pyrene	2	ND
Dibenzo(a,h)anthracene	1.6	ND
2-Chlorophenol	2	ND
Phenol	1	5
2,4-Dimethylphenol	1.8	ND
2,4,5-Trichlorophenol	4	ND
2,4,6-Trichlorophenol	1.8	ND
4-Chloro-3-methylphenol	2	ND
2,4-Dinitrophenol	28	ND
Pentachlorophenol	2	ND

  
Laboratory Supervisor



# ES ENGINEERING-SCIENCE

RESEARCH AND DEVELOPMENT LABORATORY • 600 BANCROFT WAY • BERKELEY, CALIFORNIA 94710 • 415/841-7353

Priority Pollutant Analysis  
Creosote Constituents + Pentachlorophenol- EPA 8270  
+ its degradation products

Date Received 7/23/86  
Date Reported 8/20/86

P.O. No.  
Job No. ZB104  
Page 1 OF 1

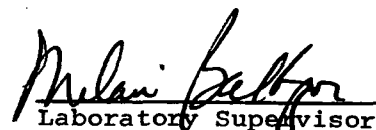
For: ES-Austin/Texas Water Commission  
Address:

Attn: Barry Hubbard

Source of Sample: TX13765-3  
Lab No: 861819

Date Collected: 7/22/86  
Time Collected: 1617

Compound	Detection Limits	ANALYTICAL RESULTS
	mg/kg	mg/kg
Naphthalene	1	ND
Acenaphthylenes	2	ND
Acenaphthene	1.2	4
Fluorene	1.2	6
Phenanthrene	4	11
Anthracene	1.2	18
Fluoranthene	1.4	40
Pyrene	1.2	72
Chrysene	1.6	26
Benzo(a)anthracene	6	26
Benzo(b)fluoranthene	4	18
Benzo(a)pyrene	1.6	4
Indeno(1,2,3-c,d)pyrene	2	4
Dibenzo(a,h)anthracene	1.6	ND
2-Chlorophenol	2	ND
Phenol	1	ND
2,4-Dimethylphenol	1.8	ND
2,4,5-Trichlorophenol	4	ND
2,4,6-Trichlorophenol	1.8	ND
4-Chloro-3-methylphenol	2	ND
2,4-Dinitrophenol	28	ND
Pentachlorophenol	2	ND

  
Laboratory Supervisor

# ES ENGINEERING-SCIENCE

RESEARCH AND DEVELOPMENT LABORATORY • 600 BANCROFT WAY • BERKELEY, CALIFORNIA 94710 • 415/841-7353

Priority Pollutant Analysis  
Creosote Constituents + Pentachlorophenol- EPA 8270  
+ its degradation products

Date Received 7/23/86  
Date Reported 8/20/86

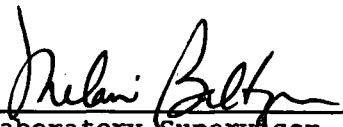
P.O. No.  
Job No. ZB104  
Page 1 OF 1

For: ES-Austin/Texas Water Commission  
Address:

Attn: Barry Hubbard

Source of Sample: TX13765-4  
Lab No: 861820  
Date Collected: 7/22/86  
Time Collected: 1644

Compound	Detection Limits	ANALYTICAL RESULTS
	mg/kg	mg/kg
Naphthalene	.05	ND
Acenaphthylylene	.1	ND
Acenaphthene	.06	ND
Fluorene	.06	ND
Phenanthrene	.2	ND
Anthracene	.06	ND
Fluoranthene	.07	.09
Pyrene	.06	.19
Chrysene	.08	.08
Benzo(a)anthracene	.3	ND
Benzo(b)fluoranthene	.2	ND
Benzo(a)pyrene	.08	ND
Indeno(1,2,3-c,d)pyrene	.1	ND
Dibenzo(a,h)anthracene	.08	ND
2-Chlorophenol	.01	ND
Phenol	.05	ND
2,4-Dimethylphenol	.09	ND
2,4,5-Trichlorophenol	.2	ND
2,4,6-Trichlorophenol	.09	ND
4-Chloro-3-methylphenol	.1	ND
2,4-Dinitrophenol	1.4	ND
Pentachlorophenol	.1	ND

  
Laboratory Supervisor

# CHAIN OF CUSTODY RECORD

PROJECT NO.		PROJECT NAME				NO. OF CONTAINERS	REMARKS									
SAMPLERS (Signatures)							<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Creosote constituents</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">pentachlorophenol</div> </div>									
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION											
TX 13765-1	7/22/86	3:52 4:07	5M	X	Background Soil	✓	✓									possible high contamination in samples TX 13765-2 through 4
TX 13765-2	7/22/86	4:07 4:17	5M	X	Background Sediment	✓	✓									For creosote constituents see attached list.
TX 13765-3	7/22/86	4:17 4:20	5M	X	Upstream Sediment	✓	✓									for all methods of analysis, and extraction see the attached methods from the QA/QC plan in the Preliminary Assessment/Site Inspection Manual.
TX 13765-4	7/22/86	4:44		X	Pond subsurface	✓	✓									for pentachlorophenol look also for the 10-20 peaks for degradation products. Peaks must be greater than 10% of the internal standard.
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Relinquished by: (Signature)		Date/Time		Received by: (Signature)						
Benny Hubbard		7/22/86 7:00		Federal Express												
Relinquished by: (Signature)		Date/Time		Received by: (Signature)		Relinquished by: (Signature)		Date/Time		Received by: (Signature)						
Relinquished by: (Signature)		Date/Time		Received for lab. by: (Signature)		Date/Time		Remarks								
				J. Zull		7/23 1330		COLD, INACT BOTTLE LABELED AS FOLLOWS:								

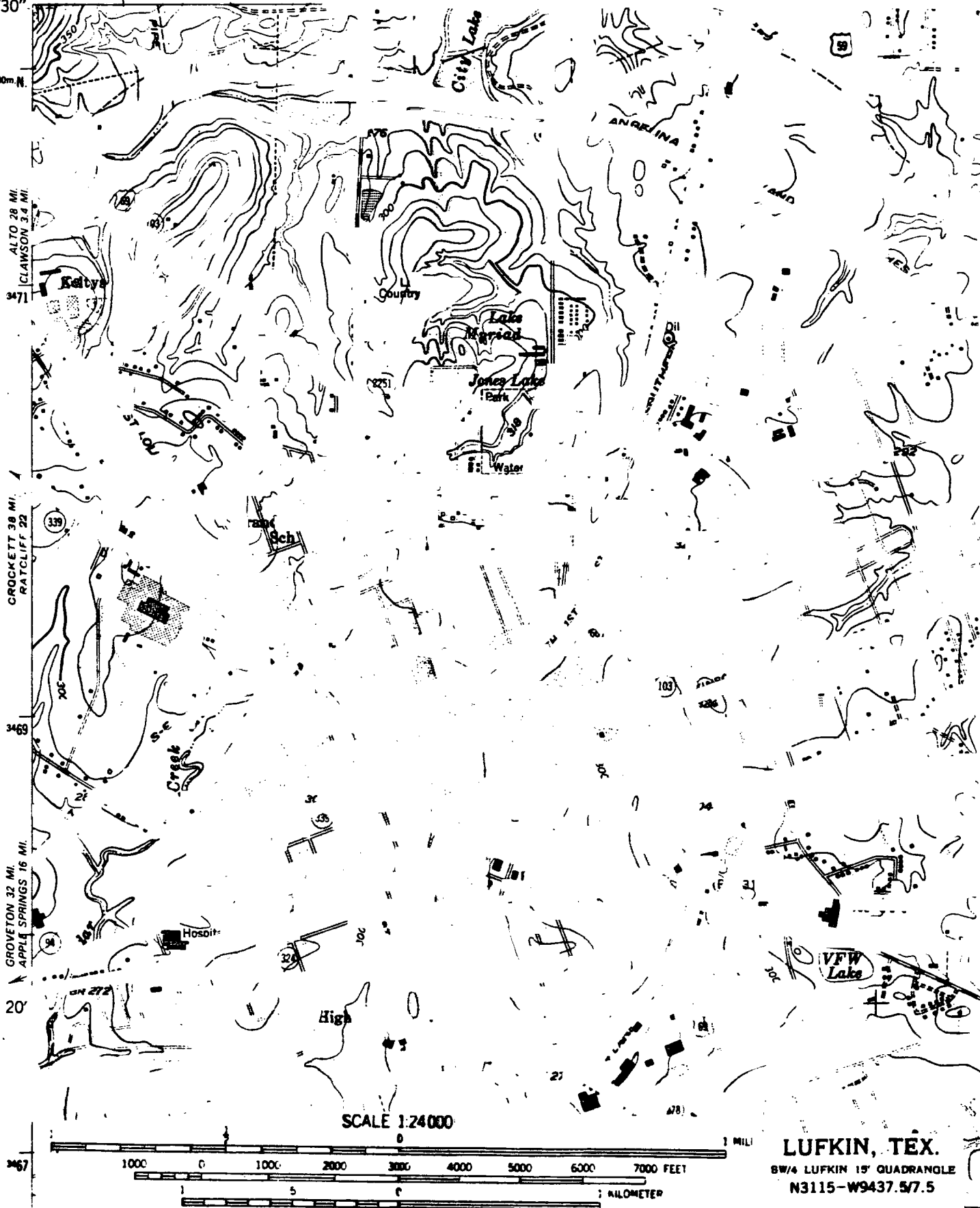
PROBLEM RESOLVED FROM  
 PHONE CONVERSATION W/ LISA ARCENEAUX  
 ON 7/25 SHEET TIMES CHANGED BY JOE M. PHONE CONVERSATION W/ DAVID WILKES 7/23

13765-1 TIME 3:52 NOT 4:07  
 - 2 " 4:07 " 4:17  
 - 3 " 4:17 " 4:20

7046 I V NE  
(CLAWSON)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

94°45' 31°22'30" 334000m E 335 44 MI TO U.S. 84 NACOGDOCHES 18 MI. 42°30"



SCALE 1:24000  
CONTOUR INTERVAL 10 FEET  
DOTTED LINES REPRESENT 5 FOOT CONTOURS  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

LUFKIN, TEX.

SW/4 LUFKIN 15' QUADRANGLE  
N3115-W9437.5/7.5

1949  
PHOTOREVISED 1980  
DMA 7046 I SW-SERIES V882

LUFKIN CREOSOTING CO.

**ZONE B**

## ZONE B

FM 32

**-ZONE  
B**

**ZON**  
**A2**

### LIMIT OF DETAILED STUDY

MAPLEWOOD  
DRIVE.

ENGLEWOOD DRIVE

**LAKEWIND  
DRIVE**

**DRIVE**  
**ZONE B**

**-ZONE B**

**ZONE B**

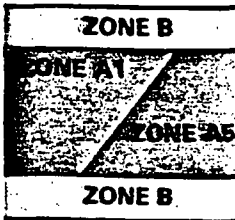
## ZONE C

**ZONE B**



287

# TO MAP

500-Year Flood Boundary	_____
100-Year Flood Boundary	_____
Zone Designations*	
100-Year Flood Boundary	_____
500-Year Flood Boundary	_____
Base Flood Elevation Line With Elevation In Feet**	~~~~~513~~~~~
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7x
Zone D Boundary	_____
River Mile	•M1.5

\*\*Referenced to the National Geodetic Vertical Datum of 1929

## \*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

## NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

For adjoining map panels, see separately printed Index To Map Panels.

INITIAL IDENTIFICATION:  
FEBRUARY 22, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:  
JULY 9, 1976

# NATIONAL FLOOD INSURANCE PROGRAM

## FIRM FLOOD INSURANCE RATE MAP

CITY OF  
**LUFKIN, TEXAS**  
ANGELINA COUNTY

PANEL 10 OF 10

COMMUNITY-PANEL NUMBER  
480009 0010 B

EFFECTIVE DATE:  
JUNE 1, 1982



Federal Emergency Management Agency





Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 3:06 SE

Comments: Old storage tank area.  
Note the blackened soil to  
the right of the concrete pad.

①



Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 3:08 NW

Comments: Boiler left on site.  
after the facility was closed.

②



Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 3:17 S

Comments: Abandoned surface  
impoundment, filled with soil.  
(Foreground) Barn in background.

③





Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 3:25 S

Comments: Culvert near plant  
road split at the seam. Blackened  
soil visible in the 3-6 inches of  
soil below the surface.

(4)



Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 3:27 SE

Comments: Drainage from the  
culvert.

(5)



Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 3:37 NW

Comments: Four 120 foot treatment  
cylinders stored at the site.

(6)





Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 3:52 W

Comments: Background soil (TX13765-1)  
Vines split soil samples.

(7)



Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 4:07 E

Comments: Upstream sediment  
(TX13765-2) -  
in drainage ditch Inside Mr  
Vine's property line.

(8)



Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 4:17 N

Comments: Downstream sediment  
(TX13765-3) -  
samples Black stains on the  
ground & grass.

(9)





Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 4:20 N

Comments: Oily sheen in drain-  
age ditch near the location

of TX13765-3.

(10)



Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 4:40 NE

Comments: Old surface impoundment  
location. Augering for sample

(11)



Photographer / Witness

Lisa Arceneaux / Barry Hubbard

Date / Time / Direction

7/22/86 4:44 NE

Comments: Subsurface soil sample  
from the surface impoundment taken  
at 2 feet down. (TX 13765-4).

(12)



**TWC SITE INSPECTION COMMENTS  
LUFKIN CREOSOTING COMPANY  
LUFKIN, TEXAS  
TX 13765**

**DOCUMENTATION OF SITE ACTIVITIES AND SITE HISTORY**

On July 22, 1986 a TWC site inspection was conducted by Lisa Arceneaux, Barry Hubbard, and David Wilkes of Engineering-Science, Inc. at the Lufkin Creosoting Company. Martyn Turner and Trish Kurl of the Texas Water Commission accompanied the Engineering-Science personnel. Mr. Danny Vines, the plant superintendent, was interviewed at his operating facility on Hwy. 69 south of Lufkin; however, the site inspection activities were conducted at the old site located inside the City of Lufkin at 1411 E. Lufkin Avenue. The interview was begun at 1:33 p.m. and covered the history and chemical handling practices at his old facility.

The Lufkin Creosoting Company (old site) is about 8 acres in size and once treated poles, posts, and dimensionalized lumber. It began operations in 1946 and was owned by 12 partners: R.E. Urwin, T.H. Ward, B.A. Thigpen, Elum Brazeal, Virgil Duke, Horace Duke, Mr. Smith, J. L. Spotton, L.M. May, H. C. Weson, D. M. Vines, and Mr. Alders. Between 1956 and 1964 Mr. Dan Vines (senior) bought the business from his partners to acquire total ownership. Before 1946 a sawmill, Southern Bell Lumber Company, occupied the site.

Another wood treating facility, Higgins Wood Treating Company, was located adjacent to the northeast corner of the site and was in operation from 1930-1973. This site was Texas Electric Coop until 1962 when the Higgins brothers bought it and changed the name to Higgins Wood Treating Company. Currently a Walmart Shopping Center is located on that site.

The Lufkin Creosoting Company was operated at the Lufkin Avenue location until 1978 when the owner closed it to move to a larger site on Hwy. 69. Equipment that had been on site included 4 treatment cylinders, 3 work tanks, 3-4 treatment tanks, 2 boilers and a surface impoundment. The cylinders and some of the tanks were sold and the work tanks were brought to the new site of Lufkin Creosoting. One of the boilers was left on site at the old location.

The surface impoundment had been used for blowdown water and was contaminated with creosote. The size of the impoundment was approximately 80' x 150' x 28". It was closed in 1973-1974 without TWC enforcement or supervision by pushing the embankment soil over the surface. Grass was observed growing over the closed impoundment.

A site reconnaissance with Mr. Vines was begun at the old site after the interview. Equipment observed on site included a boiler and 4 120-foot treatment cylinders. The cylinders were reportedly a recent purchase from the west coast and were being stored at the site. A large drainage ditch traversed the prop-

erty in an east to west direction with a portion enclosed in a culvert. The culvert was made of 6000 gallon steel diesel storage tanks welded together. Erosion channels were observed along the length of the culvert and blackened soil was observed at 3-6 inches from the surface within the channels. Black stains were seen on the sediment and grasses in the open portion of the drainage ditch. Water was flowing slowly in the ditch and had a blackish color and an oily sheen.

Around the tank farm area a 3-inch thick concrete pad was observed. No containment walls were observed and the soil on the west side of the pad was black and oily with distressed vegetation.

Soil samples were collected from the drainage ditch and the closed impoundment. A background soil sample was collected across Lufkin Blvd. south of the site. Mr. Vines split samples at each sample location. An "upgradient" sediment sample from the drainage ditch was collected from the middle of the ditch at the east property line and inside Mr. Vines' property. As the sample was collected black oily waste surfaced and floated on the water. The downstream sediment sample was collected in the middle of the open ditch. Black oily sediment was noted in the sample at a depth of approximately 5 inches below the surface. A subsurface soil sample was collected at about 2 feet below the surface at the closed surface impoundment. At this depth a very clayey black sludge with a creosote odor was encountered.

## **WASTE MANAGEMENT PRACTICES**

The treatment chemicals used at the site were creosote and pentachlorophenol (PCP). PCP was used in the early 1970's. The volume of creosote used was about 6,000 gallons/week with a maximum of 18,000 gallons stored on site. The facility used city water for the closed steaming process to pretreat the wood. The surface impoundment was once used for the blowdown water; then the company changed the process to recycling the wastewater in above-ground tanks. The tanks were equipped with bottom skimmers to recover the creosote. The cylinders and tanks were closed once every 4-5 years and the sludge was stored on site until it was removed by disposers or hauled to the city dump. Mr. Vines did not know any details of the past disposers. In 1983 BFI-CECOS International removed about 10 tons of PCP sludge from a raw material storage tank (left on site). The removal was requested by TDWR and was manifested (Attachment B).

## **ASSESSMENT AND CONCLUSIONS**

The sample results included in Attachment D indicate contamination by creosote constituents in the background soil sample and upgradient sediment sample. Although the background sampling location was vegetated and appeared normal, several creosote constituents were detected in moderate concentrations. Access to this soil is not restricted as the sample was collected along a roadway and resident's fence (see Photo 7).

The concentration of creosote constituents in the upgradient sediment sample were generally about two times higher than the background. This sample location was near the old creosote storage area which could have been a source of creosote contamination. The concentration of creosote constituents appeared to decrease in the drainage ditch at the west end of the site (as indicated by the sample results) although the soil was black and oily in appearance. Adsorption to clay and silty soil could explain the decrease of creosote concentrations in the ditch. The concentration of creosote constituents in the surface impoundment location was relatively low and only three compounds were detected. No pentachlorophenol was detected in any of the samples.

Because of the concentration of creosote found off site (where the background sample was collected) and in the upgradient on-site sediment sample, the site is given a medium hazard ranking. A follow-up site inspection is recommended to assess the extent of creosote contamination on site (in the drainage ditch and old tank farm) and off site.